

REMARKS

Claims 1-21 are pending. Claims 2 and 9 were amended to specify that the annular transition connects the two sections. Claim 7 was amended to specify the open end of the insert piece is provided with the outwardly projecting rim attached to the container as supported by Claim 1. Claim 8 was amended to depend from Claim 1. New dependent Claim 17 recites the insert piece of Claim 1 is the only insert in the container as supported at page 2, lines 16-17. New dependent Claim 18 recites the closed end is flat as shown in the figure. New dependent Claim 19 recites the height of the insert is divided in half by the annular transition as supported at page 4, lines 20-28. New dependent claim 20 recites the outwardly projecting rim has a concave cross-section as shown in the figure and the concave cross-section has an open end facing upwardly when the open end of the insert faces downwardly. The specification was also amended to state these features shown in the figure. New dependent Claim 21 recites two deep drawing steps to achieve the respective two diameters.

It is respectfully submitted no new matter is presented by the above amendments.

35 U.S.C. §102

Claims 1-3, 6, 7, 9, 10 and 13 have been rejected as being anticipated by Scudder (U.S. Patent No. 5,979,164). The Office Action asserts that FIG. 13 of Scudder discloses all of the features of the claimed invention.

It is respectfully submitted Scudder does not disclose all of the features of Claim 1.

In particular, the thermic module 316 illustrated in figure 13 of Scudder does not have an open end provided with an outwardly projecting rim for attaching to the container. The very uppermost portion of module body 324 is provided with an outwardly projecting rim, as can be seen from figure 14, but the rim is attached to ring 348, which has a safety seal 350 adhered to it, and is not attached to the container body 310. In contrast, Claim 1 recites the insert open end is provided with an outwardly projecting rim for attaching to the container.

The only part of module body 324 attached to the container is threaded portion 326 which mates with threaded container body portion 328. Threaded portion 326 is not however an outwardly projecting rim nor does the remainder of the module body 324 down to the closed end have different sections where two adjacent sections are connected to one another by an annular transition perpendicular to the wall sections.

The thermic module 316 illustrated in figure 13 of Scudder also does not have a peripheral wall comprising different sections where each section of the peripheral wall has a wall section of substantially constant diameter. The module body 324 is described in column 10 lines 25-28 as having a corrugated or pleated wall 356 rather than a wall section of substantially constant diameter. The module body 324 also comprises threaded section 326 that varies in diameter and thus also does not have a substantially constant diameter whilst the lowest section of the peripheral wall, which extends down to the closed end, is of constantly narrowing diameter.

Claim 1 is thus not anticipated by Scudder as Scudder does not disclose the elements of the open end of the insert piece being provided with an outwardly projecting rim for attaching to the container or the peripheral wall comprising different sections where each section of the peripheral wall has a wall section of substantially constant diameter.

Dependent claims further distinguish over Scudder. Claim 7 recites the container and further emphasizes the distinction of having an outwardly projecting rim attached to the container. New Claim 20 further defines the rim shape to have a concave cross-section not present in Scudder.

Claims 2, 3, 9 and 10 call for the different sections to have different diameters, one being larger than the other. Claims 2 and 9 expressly state two sections of different diameters wherein the two sections are connected by the annular transition. Page 2, line 35 - page 3, line 12 explains advantages of the Claim 3 design. New Claim 17 depends from Claim 7 but further recites the insert piece of Claim 1 is the only insert in the container. Claim 18 recites the closed end is flat. Claim 19 recites the height of the insert is divided in half by the annular transition. Advantages of this are discussed at page 4, lines 20-28.

35 U.S.C. §103

A. Claims 1 and 2

This opportunity is taken to assert Claims 1 and 2 are not obvious in view of Scudder.

The thermic module of Scudder is specifically designed to be replaceable (see column 9 lines 43-52) and this is achieved by having a threaded portion on the module body which mates with the container body. There is no hint or teaching in Scudder to even point the skilled person

in the direction of redesigning the thermic module so that it attaches to the container in a completely different manner.

To adapt the thermic module of Scudder to fall within the scope of present Claim 1 the skilled person would have to: i) remove the threaded portion of the thermic module and replace it with a wall section of substantially constant diameter; ii) provide the open end with an outwardly projecting rim for attaching to the container; iii) replace the corrugated or pleated wall with a wall section of substantially constant diameter; iv) replace the lower section of the peripheral wall with a wall section of substantially constant diameter. These amendments are well beyond an obvious step for the skilled person.

Claim 1 is thus unobvious over Scudder.

Furthermore, Claim 2 is unobvious over Scudder as there is no hint or teaching towards the peripheral wall comprising two sections of different diameters rather than the present construction of three sections, one of constantly varying diameter and one comprising a corrugated section and a threaded section. As disclosed on page 2 lines 31- 34 of the present application two sections provide the insert piece with sufficient rigidity whilst the wall can also be made sufficiently thin, as well as being favourable in terms of production.

B. Claims 4, 5, 8, 11, 12 and 14-16

Claims 4, 5, 8, 11, 12 and 14-16 stand rejected as being obvious in view of Scudder. The Office Action asserts that the two-step deep drawing process of making an insert in claims 8 and 14-16 is obvious in view of the fact that an entire subclass of patents relates to plural deep-drawing.

As for present Claim 4, there is no specific disclosure in Scudder as to what the thermic module illustrated in figs. 13 and 14 is made from. However column 8 lines 7-24 which relate to the embodiment illustrated in figs. 8-12 emphasise the cap 212 and container body 210 are made of plastic and the plastic construction of the cap and container body is an important feature of the invention particularly for economic reasons. The skilled person on reading Scudder would thus be taught towards using plastic to make the thermic module 316 and away from using the metal or packaging steel of present Claim 4.

Also, Applicant respectfully disagrees with the Office action assertion that the skilled person would use plastic coated packaging steel of Claim 4 for the clear and obvious benefit of

providing high heat tolerance and insulation. As mentioned on page 1 lines 34 - page 2 line 2 of the present application the heat transfer from the heating means to the drink should be optimised, not minimised as indicated by the Office action's argument. As described on page 3 lines 17-19 of the present application, the packaging steel is preferably coated with plastic of Claim 5 to protect the insert piece against corrosion and to protect the product in the container against being affected by direct contact with the packaging steel.

The Office action also rejects Claim 8 as being obvious over Scudder. Claim 8 (amended as described above) relates to a method of forming an insert piece according to Claim 1. As explained above, Scudder does not anticipate or render obvious the insert piece of Claim 1. Scudder therefore does not render Claim 8 obvious.

Moreover, deep-drawing steps further distinguish over Scudder. Paragraph 2 of the Office action asserts column 2 lines 13-20 discloses the insert in Fig. 13 of Scudder is produced by deep-drawing. Applicant does not agree with the Office action on this point, as column 2 lines 13-20 of Scudder refer to a prior art container and not to the invention as disclosed in Scudder. The prior art container (not Scudder's) has an inner can (which contains the reactants to heat or cool the contents of the outer can) unitarily formed with an outer can. The unitary container body is formed by providing a metal cylinder closed at one end and punching or deep drawing a cavity in the closed end. As can clearly be seen from fig. 13 of Scudder the thermic module is not formed unitarily with the container body and the deep drawing teaching does not apply, particularly in view of the disclosure in column 8 lines 7-24 of Scudder relating to the advantages of using plastic.

The thermic module as shown in fig. 13 of Scudder could also not be formed by deep drawing as it has to comprise a threaded portion for attaching it to the container body. It is not possible to produce such a threaded portion by deep drawing and it would also be very difficult to deep draw an insert piece that was already provided with a threaded portion on the outer side of its peripheral wall. Forming the corrugated wall of the module body would also be difficult. It would thus not have been obvious to one of ordinary skill in the art to incorporate two deep-drawing steps into the invention disclosed by Scudder.

The Office action asserts the plural deep drawing steps in the claims recite a "design choice". The Office action overlooks that the claims are not directed solely to the two-step

drawing process, but moreover to at least two deep drawing steps provided to achieve a peripheral wall of the insert piece composed of two section of different diameters with two adjacent sections connected to one another by an annular transition substantially perpendicular to the wall sections. To provide two adjacent sections connected to one another by an annular transition substantially perpendicular to the wall sections is not a mere "design choice". Rather to provide this annular ridge is a highly advantageous. For example, page 2, lines 17-34 and page 4, lines 20-28 explain the annular ridge adds rigidity to the insert piece.

The Office action further asserts the number of steps in the process is dependent on the desired shape of the insert. However, it is respectfully submitted this overlooks the reasons for the shape of the insert, e.g., the above-mentioned rigidity, outlined in the specification.

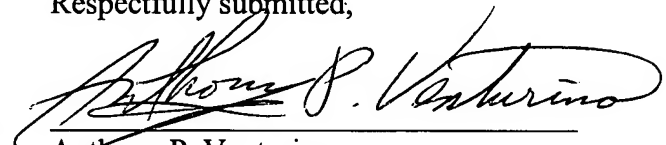
Conclusion

In view of the above, it is respectfully submitted that all objections and rejections are overcome. Thus, a Notice of Allowance is respectfully requested.

Respectfully submitted,

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